

Notice of Allowability	Application No. <i>10/034,734</i>	Applicant(s) BROAD ET AL.	
	Examiner Charles Chow	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/13/2006 & 1/6/2006.
2. ☒ The allowed claim(s) is/are 15, 16 and 18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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Detailed Action

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney George Pappas on 1/19/2006 at (858) 651-1306.

Attorney has authorized examiner to delete the typographical error of the duplicated paragraph in lines 6-7 of the claim 15, as follows:

In lines 6-8 of claim 15, delete the following duplicated paragraph,

---- operating the DC loop in the acquisition mode for a particular time duration to correct for DC offset in a desired signal, wherein the particular time duration is inversely proportional to a loop bandwidth for the DC loop for the acquisition mode, and ----.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Applicant has canceled claims 1-14, 17, 19-46 and retained only previously allowed independent claims 15-16, 18, 7/6/2005, which were amended with the claimed features from the previously objected claims 15-16, 18, in the office action.

Claims 15-16, 18 are allowable over the prior art of record, the prior art fails to teach singly, particularly, or in combination, the subject matter for operating a AGC DC loop, the selecting of the operating mode including acquisition mode; and **if** the selected operating

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mode is the acquisition mode, operating the DC loop for a particular time duration to **correct DC offset, with the particular duration** which is **inversely proportional to a loop bandwidth for the DC loop**, and transitioning out the acquisition mode after the particular time duration, the acquisition mode being selected in response to an event expected to the result in a large DC offset in the desired signal, where the event corresponds to a new analog circuit stages to process the desired signal [claim 15]; where the event corresponds to application of a new DC offset value to correct for static DC offset in the desired signal [claim 16]; the transition being made from acquisition mode to the tracking mode after the particular time duration [claim 18].

The closest prior art **Fagan (GB 2,229,333A)** teaches a fine gain control 17 with control G2 and a coarse gain control element 14 with control B [Fig. 1, page 6, lines 1-16], the processor 15 provides control B to ADVA 14 and control signal G2 to 17 [page 7, line 28 to page 8, line 34]. Fagan fail to teach the above allowable features.

Other prior arts in below has been considered, but they fail to teach the above claimed features.

Prentice et al. (US 6,763,228 B2) teaches the zero intermediate frequency ZIF transceiver 101 [Fig. 1, col. 7, lines 4-20, abstract], the gain control can be performed in linear format, and also can be in log format [col. 3, lines 30-35] for the ZIF transceiver.

Severson et al. (US 2003/0100,286, A1), teaches the AGC loop 170, the DC offset loop 140, (Fig. 1, abstract) for the direct conversion receiver. Severson et al. has later filing date.

Ruelke (US 6,459,889 B1) teaches the AGC feedback loop in [Fig. 1, abstract], the DC offset correction for slotted protocol and different strategies for non-slotted protocol [col. 5, lines 26-40, Fig. 3B].

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Other references are also considered, Webster et al. (US 6,748,200B1), Becker et al. (US 5,612,975), Dutkiewicz et al. (US 5,629,960), Sutterlin et al. (US 5,463,662), Heck et al. (US 5,483,691), Kotzian (US 5,014,013), Wilson (US 5,627,857), but fall to teach the above allowable features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow C.C.

January 19, 2006.


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